

US EPA ARCHIVE DOCUMENT

# Composting Program:

## Lafayette College, Easton, PA

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Presenters:

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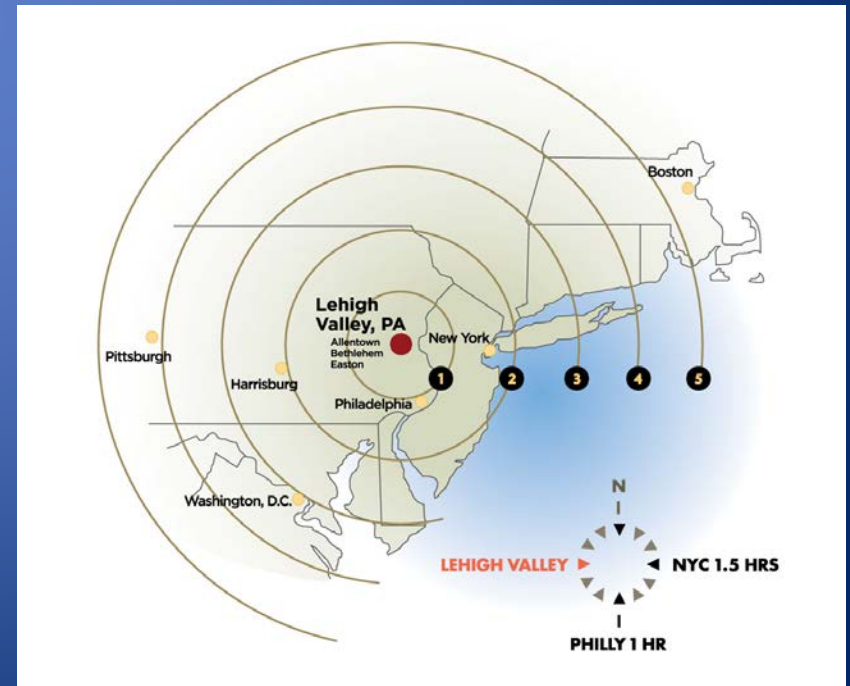


May 2010



# LAFAYETTE COLLEGE

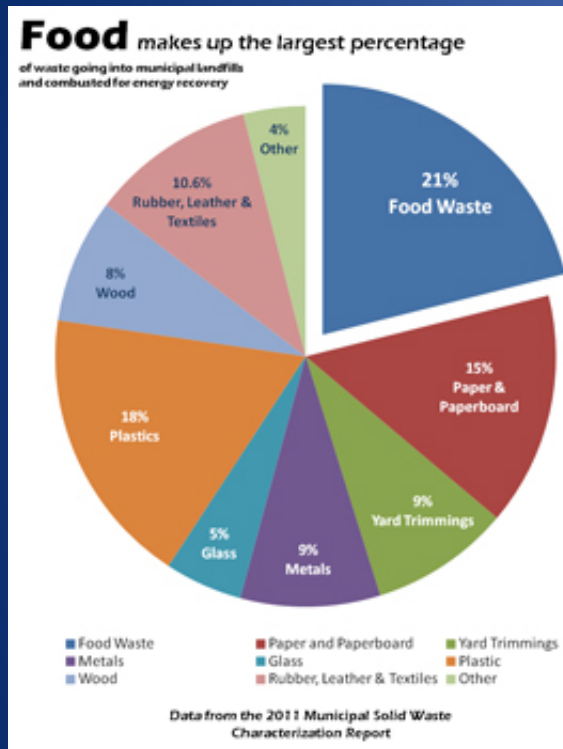
Easton, PA





# Problem #1

## Food waste.



<http://www.dailymail.co.uk/news/article-1086312/Household-rubbish-piled-military-bases-landfill-sites-run-space.html>

Over 36 million tons of food waste reach landfills each year in the United States. This waste could be prevented, used to feed people, or composted to create a valuable soil amendment. (<http://www.epa.gov/foodrecovery/>)

# Solution:

## Food-waste composting

Composting is the recycling of materials including leaves, grass, paper and food waste



<http://www.stoffel.us/archives/2005/08/leaves.html>

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[http://lawncare.blogs.com/photos/uncategorized/2007/08/16/05\\_grass\\_seed\\_faqs.jpg](http://lawncare.blogs.com/photos/uncategorized/2007/08/16/05_grass_seed_faqs.jpg)

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<http://www.barnet.gov.uk/index/environment-planning/rubbish-waste-and-recycling/waste-minimisation/reducing-food-waste.htm>

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Nutrient Rich Soil Amendment

# Steps to start composting program:

## 1. Create "Composting Committee" of

Lafayette Environmental Awareness and  
Protection &  
Society of Environmental Engineers and  
Scientists





# Participation and Buy-In

Institution	Students	Administration	Faculty	Plant Ops	Dining Services	Community
University #1	X			X		
University #2		X				
University #3	X			X	X	
University #4	X			X	X	
University #5	X	X		X		X
University #6	X				X	
Lafayette College	X	X	X	X	X	X

# Steps to starting composting program:

2. Find faculty support

3. Get the OK with administration

4. Collaborate with Dining Service and Campus Maintenance Staff



NO STYROFOAM



NO PLASTIC



NO CUPS OR SILVERWARE

**Compostables Only Please!**





# All the PLAYERS

## Administration/Staff

- Unified campus

## Student Perspective

Making a lasting impact:  
-make beneficial change  
-problem solving with tangible results  
-make a difference

-Student/Faculty excitement  
-Interaction outside of classroom is scholarly ways

Connect in unique ways



Connect in unique ways

## Plant Operations & Dining Services

-Connect with Community in meaningful ways  
-Work towards sustainable campus infrastructure

## Faculty Perspective

-Academic value: research and course involvement  
-Community connections  
- Long standing student interest

# Steps to starting composting program:

5. *Get students excited!*



# Steps to starting composting program:

6. Make some compost and continue to scale up.



BUT, all partners can not forget about the investment and resources needed for such an operation:

- Money
- Space
- Human Resources
- Continued Management



# Steps to starting composting program:

## 7. Find external funding

PA Department of Environmental  
Protection

Clinton Global Initiative Grant  
Private Funding Sources

# Compost Lineage

**Fall 2013**

BON APPETIT  
COMPOSING Resumed

**Summer 2012**

Pilot - Windrows started

**2011- 2012**

Researched Nitrogen  
Management in Compost

**Summer 2010**

Composting process  
For Tubs developed

**2010**

Composting site was built  
at Bushkill Commons

**2008**

Permanent Test Site  
established

**Fall 2012**

Internal Problems Develop  
Sodexo Contract Ended  
COMPOSTING Halted

**Summer 2011**

Compositing institutionalized

**May 2010**

First Earth Tub run

**2009**

Two Earth Tubs Purchased

**2008**

Research and testing site  
developed to investigate  
feasibility

**2007**

Compost program  
initiated by students



Compost created from food waste in the Earth  
Tubs at Lafayette College



30000+ lbs of food have been diverted from  
the landfill since the installation of Earth  
Tubs in July 2010

# The College Sustainability Report Card

Lafayette Report Card					
	2007	2008	2009	2010	2011
Overall	D+	D-	C	C+	B
Food & Recycling	D	C	B	B	B
Admin.	C	D	B	A	A

Composting Institutionalized





# Evolution of our Program

Compost → ?



# Campus Organic Vegetable gardening



# Sustainable Campus Community



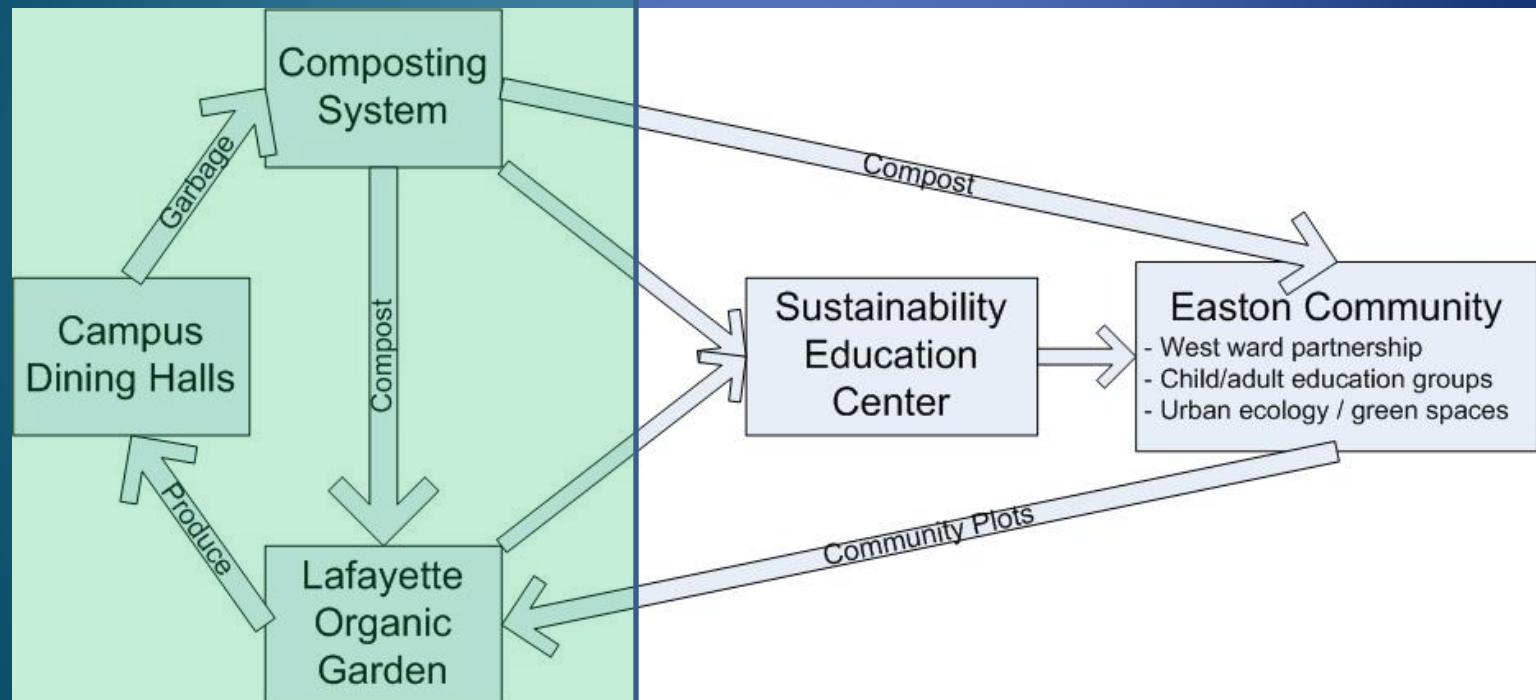
Students  
Faculty  
Administration  
Staff  
Dining Services  
Campus Maintenance





# What's Next?

## Current 2013 Program



# Community Involvement and Academic Extensions

## 1. Community Outreach and Education



# Important Factors for College or Universities

## 2. Academic Involvement





# The Stats

- Waste collected 5 days a week
  - Food Waste Pulped
- 50 - 200 lb day - up to about 1000 lbs/Week (2000 lbs = 1 Ton)
  - Matched with equal portion of bulking and additional carbon
    - C/N Ratio
- Earth Tub Operations
  - Fill for One Week → Earth Tub Volume = 3 ft<sup>3</sup>
  - Bake for one Week
  - About a month to stabilize
- Monitor
  - Moisture
  - Odor
  - Temperature
  - Mass
  - General Observations
- Savings
  - Tipping Fees
    - About \$80/Ton
  - Compost = Nutrient Rich Organic Fertilizer
    - Applications
      - Mulch Enrichment for flower beds and around trees
      - Vegetable Gardens



# Ups and Downs

- Communications
- Players
  - Students
  - Faculty
  - Dining service
  - Plant Ops.
  - Administration

Picture of Stacy, Kney and George

*Compost Team 2010*

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THANK YOU

WE WANT YOU  
TO GET INVOLVED

[www.youtube.com/watch?v=5KYamKNEwAw](http://www.youtube.com/watch?v=5KYamKNEwAw)